## JCO3 Rec'd PCT/PTO 25 MAY 20091

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PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/533,315 MAY 2 5 2005 Filing Date **TRANSMITTAL** April 29, 2005 **FÖRM** First Named Inventor Hans Wohlfromm Art Unit N/A (to be used for all correspondence after initial filing) Examiner Name Not Yet Assigned Attorney Docket Number Total Number of Pages in This Submission 12810-00081-US ENCLOSURES (Check all that apply) After Allowance Communication Fee Transmittal Form Drawing(s) Appeal Communication to Board of Fee Attached Licensing-related Papers Appeals and Interferences Appeal Communication to TC Amendment/Reply Petition (Appeal Notice, Brief, Reply Brief) Petition to Convert to a After Final Proprietary Information Provisional Application Power of Attorney, Revocation, Affidavits/declaration(s) Status Letter Change of Correspondence Address Other Enclosure(s) (please X Identify below): Extension of Time Request Terminal Disclaimer 1449 Form Express Abandonment Request Request for Refund Citations Information Disclosure Statement CD, Number of CD(s) Certified Copy of Priority Landscape Table on CD Document(s) Reply to Missing Parts/ Remarks Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name CONNOLLY BOVE LODGE & HUTZ LLP Signature Printed name Matthew J. Mason Date Reg. No. May 25, 2005 44.904



Docket No.: 12810-00081-US

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Hans Wohlfromm et al.

Application No.: 10/533,315

Filed: April 29, 2005

For: METAL POWDER INJECTION MOLDING

MATERIAL AND METAL POWDER INJECTION MOLDING METHOD

Confirmation No.: N/A

Art Unit: N/A

Examiner: Not Yet Assigned

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

Customer Window
U.S. Patent and Trademark Office
Randolph Building
401 Dulany Street
Alexandria, Virginia 22314

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed within three months of the date of entry of the national stage of an international application as set forth in 37 CFR 1.491 (37 CFR 1.97(b)(2)).

A summary (or abstract) of the non-English language references is enclosed.

Docket No.: 12810-00081-US

A concise explanation of relevance of the items listed on form PTO/SB/08 is given for only non-English language listed items.

DE 100 31 923 relates to soft magnetic material with heterogeneous building of structures and procedure for its production.

DE 199 25 197 A1 relates to an injection mouldable metallic powder composition and injection moulding and sinter procedure using a such composition. A copy of the counterpart U.S. Patent 6,051,184 has been provided.

JP 06-228607 relates to a method to the production of sintered metallic part by injection molding of metal powder. An English-language abstract has been provided.

EP 0 446 708 A2 relates to thermoplastic materials for manufacturing metallic articles. A copy of counterpart U.S. Patent 5,198,489 has been provided.

EP 0 465 940 A2 relates to thermoplastic masses for preparing metallic mouldings. A copy of counterpart U.S. Patent 5,362,791 has been provided.

EP 0 582 209 A1 relates to alkoxylation products and their use as dispesion agents. A copy of counterpart U.S. Patent 5,424,445 has been provided.

EP 0 710 516 A2 relates to process and injection-moulding compound for the manufacturing of shaped metallic bodies. A copy of counterpart U.S. Patent 5,802,437 has been provided.

WO 94/25205 relates to a method of producing sintered articles. A copy of counterpart U.S. Patent 5,611,978 has been provided.

WO 01/81467 A1 relates to a binding agent for inorganic material powders for producing metallic and ceramic moulded boides. A copy of counterpart U.S. Publication 20030091456 has been provided.

Application No.: Not Yet Assigned Docket No.: 12810-00081-US

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0185, under Order No. 12810-00081-US.

Dated:

5/25/2005

Respectfully submitted,

By:

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Substitute for form 1449A/B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

Complete if Known			
Application Number	Not Yet Assigned		
Filing Date	April 29, 2005		
First Named Inventor	Hans Wohlfromm		
Art Unit	N/A		
Examiner Name	Not Yet Assigned		
Attorney Docket Number	12810-00081-US		

	U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where
		Number-Kind Code <sup>2</sup> ( if known)			Relevant Passages or Relevant Figures Appear
		2003/0091456 A1	05-15-2003	Bloemacher et al.	
		5,198,489	03-30-1993	Sterzel et al.	
		5,362,791	11-08-1994	Ebenhoech et al.	
		5,424,445	06-13-1995	Hendrick ter Maat et al.	
		5,611,978	03-18-1997	Truebenbach	
		6,051,184	04-18-2000	Kankawa	*
		5,802,437	09-01-1998	BASF Aktiengesellschaft	

	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.¹	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>6</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		DE 100 31 923 A1	01-17-2022	Robert Bosch GmbH		П	
		DE 199 25 197 A1	12-09-1999	Mold Research Co., Ltd.			
		JP 6-228607	08-16-1994	Kawasaki Steel Corp.			
		EP 0 446 708 A2	09-18-1991	BASF Aktiengesellschaft			
		EP 0 465 940 A2	01-15-1992	BASF Aktiengesellschaft			
		EP 0 582 209 A1	02-09-1994	BASF Aktiengesellschaft			
		EP 0 710 516 A2	05-08-1996	BASF Aktiengesellschaft			
		WO 94/25205	11-10-1994	BASF Aktiengesellschaft			
		WO 01/81467 A1	11-01-2001	BASF Aktiengesellschaft			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²	
	-	Arakida and Miura, "Powder Injection Molding as a Metal Forming Process-Effects of Powder Morphology, Size and Size Distribution", Key Engineering Materials, 1991, Vols. 53-55, pp. 377-382.		
		Erickson, "Injection Molding", ASM Handbook (formerly Ninth Ed., Metals Handbook), 1984, Vol. 7.		
		German, "Ch. 3: Powders", Injection Molding Metals and Ceramics, 1997, pp. 55-83.		
		Karatas and Saritas, "Rheological Properties of MIM Feedstocks Produced from Gas and Water-Atomized 316L Stainless Steel Powders", Advances in Powder Metallurgy and Particulate Materials, 2001, pp. 4-45-4-51.		
		Pease III and Potter, "Mechanical Properties of P/M Materials", ASM Handbook, 1993, Vol. 7: Powder Metallurgy, pp. 463-468.		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. C:\NrPortb\DC\DKNIGHT\32102\_1.DOC

Examiner	Date ·
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